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Job Analysis
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20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

This regulation defines TRADOC policy, objectives and requirements for the conduct of job and task analysis within the training developments process. It specifies the minimum acceptable products to support the TRADOC training developments process in the area of job/task analysis. Procedural guides for implementing this regulation are found in TR Pam 351-4(T): Job/Task Analysis Handbook.

TRADOC Reg 351-4

DEPARTMENT OF THE ARMY
HEADQUARTERS, UNITED STATES ARMY TRAINING AND DOCTRINE COMMAND
Fort Monroe, Virginia 23651

TRADOC Regulation
No 351-4   9 March 1979

Schools
JOB & TASK ANALYSIS
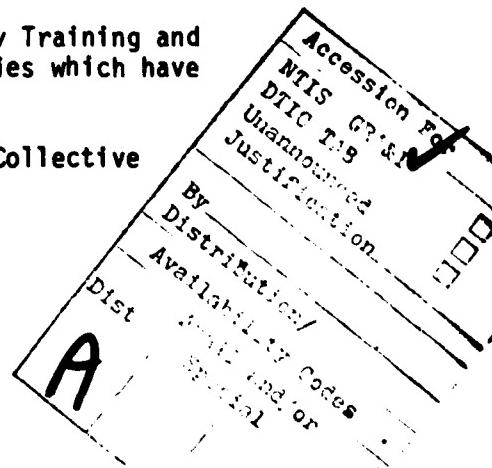
1. <u>Purpose</u>. This regulation defines TRADOC policy, objectives and requirements for the conduct of job and task analysis within the training developments process.

2. <u>Scope</u>.

   a. This regulation specifies the minimal acceptable products to support the TRADOC training developments (TD) process in the area of job and task analysis. Procedural guides for the implementation of this regulation are found in TRADOC Pamphlet 351-4, Job and Task Analysis Handbook (to be published).

   b. This regulation is applicable to all U.S. Army Training and Doctrine Command (TRADOC) service schools and activities which have responsibilities for job and task analysis.

3. <u>Glossary</u>. See TRADOC Circular 350-3, Individual/Collective Training and Development Glossary (to be published).
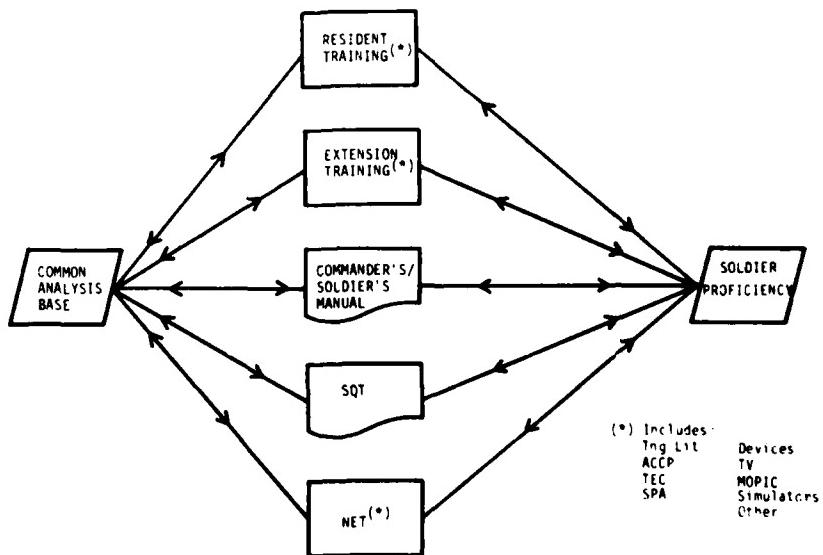
4. Background.

a. General. The systematic approach to gathering and using job
and task data in the training developments process provides the base
on which training is designed, developed, implemented, and evaluated
in the Army training system. This developmental process inherently
requires logical management procedures to support and delineate the
areas of responsibility necessary for its completion. Varied studies
and publications sponsored by TRADOC have resulted in the training
developments process as described in TRADOC Regulation 350-2, Develop-
ment, Implementation and Evaluation of Individual Training, and the
management concept of individual training described in TRADOC Cir 351-3,
Individual Training Plan (ITP (TRP).   This regulation supports these
processes by providing requirements for the conduct of job and task
analysis.
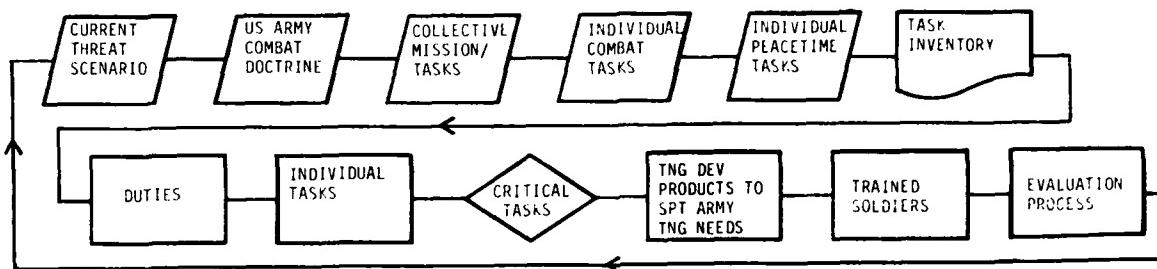
b. Precedence. The process addressed in this publication and
TRADOC Pam 351-4 are derivatives of TRADOC Pam 350-30, Interservice
Procedures for Instructional Systems Development. Requirements
addressed within this regulation and TRADOC Pam 351-4 take precedence
over any previous TRADOC guidance on job and task analysis and sup-
plement those found in TRADOC Pam 350-30.

c. Results. The ultimate use of the job and task analysis process
is the creation of training developments products to train soldiers to
achieve job/mission proficiency (i.e., peacetime and wartime requirements).
Inherent in this requirement is that the job/task analysis process forms
a common base for these products and provides the basis for a traceable
audit trail that documents the decisions leading to the development of
these individual training developments products. A simplistic overview
of this is depicted below:

d. The job and task analysis process.

(1) The process of job and task analysis includes an extensive examination of the threat, which defines combat developments, combat doctrine, the organization, and the resulting ARTEP collective missions. It is within the context of this, that the analyst derives the tasks required for individual combat survivability and job proficiency. The culmination of this comprehensive analysis provides the base on which all training developments products are developed to support the U.S. Army's training needs. A simplified sequencing of these events is expressed in the following flow chart:

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┌─────────┐  ┌─────────┐  ┌──────────┐  ┌──────────┐  ┌──────────┐  ┌──────────┐
│ CURRENT │  │ US ARMY │  │COLLECTIVE│  │INDIVIDUAL│  │INDIVIDUAL│  │ TASK     │
│ THREAT  │  │ COMBAT  │  │MISSION/  │  │COMBAT    │  │PEACETIME │  │ INVENTORY│
│ SCENARIO│  │ DOCTRINE│  │TASKS     │  │TASKS     │  │TASKS     │  │          │
└─────────┘  └─────────┘  └──────────┘  └──────────┘  └──────────┘  └──────────┘

       ┌──────────┐  ┌──────────┐            ┌──────────┐  ┌──────────┐  ┌──────────┐
       │          │  │INDIVIDUAL│  ╱CRITICAL╲ │TNG DEV   │  │TRAINED   │  │EVALUATION│
       │  DUTIES  │  │TASKS     │  ╲ TASKS  ╱ │PRODUCTS TO│ │SOLDIERS  │  │PROCESS   │
       │          │  │          │            │SPT ARMY  │  │          │  │          │
       └──────────┘  └──────────┘            │TNG NEEDS │  └──────────┘  └──────────┘
                                             └──────────┘
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(2) The conduct of this analysis process can not be done in isolation. In addition to analysis requirements the analyst is a collector of information and his job requires his interfacing with many offices/agencies (e.g., Directors of Combat Developments, Evaluation, Training) to obtain data on doctrine, threat, collective/ individual training interface, new and proposed equipment (U.S. and foreign), etc. Failure to investigate all aspects of a specialty (current and future) could result in creating training packages/products that are obsolete before their use. A job and task analysis plan that is complete in every detail and properly executed can avoid this problem.

(3) The analysis process relies upon the competency of all individuals involved in it as well as the management and support it obtains in its implementation. The minimum essential elements for this requirement are as follows:

a. The job and task analysis management plan.

b. Training of all personnel involved in the job and task analysis process.

c. Feedback mechanisms.

d. Audit trail/empirical files.

5. <u>Responsibilities</u>.

a. DCST, TRADOC exercises staff responsibility for the training developments process.

b. Commandants, TRADOC service schools will--

(1) Ensure that a systematic job and task analysis is conducted to support the TRADOC training developments process as outlined in this regulation; TRADOC Pam 351-4, Job and Task Analysis Handbook; TRADOC Circular 351-3, Individual Training Plan; TRADOC Reg 350-2, Development, Implementation and Evaluation of Individual Training; and TRADOC Circular 350-2, Officer Job/Task Analysis and Training Development.

(2) Ensure all personnel involved in job and task analysis receive training to support their positions/responsibilities.

(3) Ensure internal and external school evaluations are conducted to support the feedback mechanism for job and task analysis.

(4) Ensure that every task in a Soldier's Manual, Commander's Manual, resident training, extension training and all other end products of the training developments process is traceable back to the specific task analysis on which the end product was prepared.

c. Director, Training Developments Institute serves as the TRADOC DCST central point of contact on the job and task analysis process, the job and task analysis training package, and job and task analysis/ ITP interface.

6. <u>Scheduling</u>.

a. The conduct of a job and task analysis for its own sake is not cost effective. Each effort requires the expenditure of considerable resources and therefore must be planned and managed properly. Requirements for enlisted job and task analysis efforts must be submitted to HQ TRADOC in accordance with TRADOC Circular 351-3. Requirements for officer job and task analysis will be submitted under the guidance of TRADOC Circular 350-2, Officer Job/Task Analysis and Training Development. Scheduling of <u>new</u> or <u>revised</u> job and task analysis projects within these guidelines could take place when one of the following events occurs:

(1) EPMS conversions.

(2) RETO requirements.

(3) SM/CM revisions.

(4) Introduction of new equipment in a specialty (off-the-shelf,
new acquisitions).

(5) TRADOC service school internal and/or external evaluation
feedback.

(6) Job/task discrepancy feedback from the field.

(7) Product Improvement Plan (PIP) implementation altering a
functional system.

(8) Training Developments Information System (TDIS) requirements/
conversion.

(9) Creation of a new officer or enlisted specialty.

b. This publication does not require previously completed actions
to be revised. Revisions take place as the need becomes apparent.

7. Job and task management. The key management controls of the job
and task analysis process are the Job and Task Analysis Plan and the
Individual Training Plan Proposal (ITPP). (See TRADOC Cir 351-3 (ITP)
for additional information/guidance on the ITPP). When the school de-
termines that it must analyze, for whatever reason, one of its special-
ties it first develops a detailed job and task analysis plan to describe
how the analysis will take place. An abbreviated version of this plan,
with other information, is incorporated into the Initial Training Plan
Proposal and is forwarded to TRADOC to signal an intent to commit re-
sources on a given specialty. Major paragraphs of the Job and Task
Analysis Plan are described below.

a. Officer/enlisted specialty.

b. Job description.

c. Plan rationale.

d. Implications of the job and task analysis.

e. Target population.

f. Resource requirements/constraints.

g. Data sources.

h. Deliverables.

8. <u>Job and Task Analysis Plan</u>.

a. The Job and Task Analysis Plan is used to develop management's concept of a systematic approach for job and task analysis. It serves as the planning and control document and institutes the requirements necessary to effect a logical approach to the analysis process. The plan is the responsibility of the commandant of each school and should be approved at as high a level as possible. It delineates what is to be done, how it is to be done, and establishes milestones to be applied in its implementation. The intent of the plan is that it be a useable document; being updated when necessary.

b. Guidance for completing the plan is noted below. Supporting guidance is provided in TRADOC Pam 351-4, Job and Task Analysis Handbook. Additional paragraphs needed/required by the initiating school should be included.

(1) Officer/enlisted specialty. Identify the specialty (officer or enlisted) being analyzed or, if applicable, portions thereof (e.g., skill level, job).

(2) Job description. Description of job(s) to be analyzed (e.g., existing or proposed).

(3) Plan rationale. Describe the reason for the analysis effort (e.g., performance deficiency, new specialty, product improvement plan implementation, other). This section should provide a common frame of reference to permit any reviewer to identify the specific reason for the initiation of this requirement.

(4) Implication of job and task analysis. Analysis efforts to revise, modify and/or refine a specialty (or portion thereof) must ensure the planning effort identifies any current training developments product(s) that may be affected by the analysis results (e.g., a PIP for engine "X" could require changes in resident training, simulation/training devices, SM/CM, SQT, extension training products and new equipment training requirements). These training development products must be identified and trainers notified of forthcoming changes by the proponent school.

(5) Target population (TP). The target population for a training developments effort must be identified to insure the training products are compatible with the personnel in the field, to identify entry level qualifications for new specialties and/or to determine what must be included in an education/training requirement.

(6) Resource requirements/constraints. Any previously identified resource requirements should be clarified as they relate to the job and task analysis process. Any constraints must be identified and resolved to avoid complications in completing this process. The following areas will be discussed in detail in the Job and Task Analysis Plan:

(a) Time. Specify time allocated for the conduct of the analysis effort including phasing of requirements and personnel interface (i.e., assigned, tasked personnel).

(b) Personnel. Personnel requirements for the analysis effort must be identified well in advance to permit proper identification/selection/ assignment/training to support this requirement. Personnel needs should reflect a work requirement that considers the systematic process of · analysis. It is not reasonable to assume a requirement of 300 man days can be met by 10 men for 30 days when, because of project constraints (e.g., administering of a mailed survey that may require 120 days to complete) the requirement must be completed by two men for 150 days. Specific personnel requirements must be elaborated upon and justified.

(c) Scheduling. Necessary requirements must be addressed/resolved to permit those needed (e.g., TDY, printing requirements, contracts) to be programmed for implementation.

(7) Data sources. Sources of data used/to be used in the analysis effort will be identified to permit the reviewer/user of the plan the opportunity to understand:

(a) The source of data being used to support the on-going effort, and

(b) to identify sources not being used that could assist in the analysis.

(8) Deliverables. Deliverable products of a completed job and task analysis process support follow-on efforts and provide records/ justification of completed actions. The plan must anticipate these requirements and insure resources required are identified. Minimum deliverables are:

(a) Completed target population description.

(b) Job demographic data.

(c) Task inventory (initial).

(d) Task inventory (final).

(e) Task Selection Board SOP.

(f) Tasks selected for training/critical task list to include

criteria for selection and rationale for selection.

(g) Task analysis worksheet (required for each task selected for training) with site selection recommendations.

c. Selecting tasks for training/critical task selection.

(1) The requirement to select tasks for training/critical task selection is the most important decision in the early stage of the training developments process. It is not an easy step and can only be done by each specialty's proponent school. Since it is a complex process the recommended methods are not addressed in this regulation but are discussed in length in TRADOC Pam 351-4, Job and Task Analysis Handbook.

(2) Tasks selected in this step will form the basis for all training development products and will be trained. Training can be in varied forms (e.g., institution, SOJT or self study) or prepared as a job performance aid (JPA). Tasks selected for enlisted specialties will be included in the Soldier's and Commander's Manuals.

(3) To properly manage this step the following requirements exist:

(a) SOP for selecting tasks for training/critical tasks.

(b) Task selection board.

(4) Standing Operating Procedure (SOP).

(a) Provides guidance to analysts and task selection board for task selection criteria.

(b) Contents will include:

1. Current doctrine, threat, and mission guidance.

2. Board composition requirements.

3. Powers of head of board.

4. Designation of arbitrator for disputes.

5. Training priority guidance, TRADOC Reg 350-2, Development, Implementation and Evaluation of Individual Training.

<u>6</u>. Guidance to analysts (i.e., requirement to submit rationale
for and data on methods used to select tasks, justification for method(s)
used, and other requirements as designated by service school to ensure
understanding of process used).

(5) Task selection board.

(a) Completes the formal step in selecting tasks for training/
critical tasks by gaining consensus from members on those tasks pre-
sented before it and submitting those being recommended to the comman-
dant of the school for approval as critical tasks.

(b) Majority of members should be knowledgeable of systems approach
to training.

(c) Board should be convened in a block of days to avoid outside
interference of this essential function.

9. <u>Training</u>. Training to support the job and task analysis process
must be conducted to provide a common set of skills and knowledges
for all assigned personnel and those tasked to support any analysis
effort. A job and task analysis job training package is available to
the DTD of each service school and other activities having a respon-
sibility for analysis through TDI. This package can be supplemented
with service school unique examples, products, requirements.

10. <u>Job and task analysis feedback</u>. Within any well managed system,
positive and negative feedback loops must be incorporated to ensure
currency of a project and to identify deficiencies that exist in the
field that affect job proficiency. These routes of communication permit
the proponents of training access to field comments on the adequacy of
their training developments product (training program/soldiers) and
provide the rationale for any changes required to correct the deficiency.

a. Surveys.

(1) Army Occupational Survey Program (AOSP). A system of col-
lection and computer-assisted processing, storage, retrieval, and
analysis of detailed military occupational information, managed by
MILPERCEN, controlled (within TRADOC) by TDI. Data collection ques-
tionnaires are administered through AOSP project officers within
MACOMS. Types of AOSP final reports are addressed in AR 611-3.

(2) Field surveys. Field surveys offer the greatest opportunity
to training developers since they can be constructed to specific needs
(e.g., task analysis, follow-up data requirements). When conducted
within TRADOC, commandants are authorized to initiate and conduct
surveys to support the training developments process. Surveys to be
administered outside TRADOC require MILPERCEN approval (AR 611-3, C1).

b. School evaluations. The Director of Evaluation in each school must support the analysis system through internal and external evaluation efforts. These feedback loop(s) provide an excellent management tool for each commandant to ascertain the effectiveness of the training products and the existing management system created to support the process.

c. Field comments. Utilization of the feedback mechanisms found within the Soldier's and Commander's Manuals and their interface with the SQT provide user and ommander's comments on these training developments products.

d. Branch magazines/PM magazine/letters to the editor. This source provides candid feedback from users in the field.

11. <u>Job and task analysis audit trail/empirical files</u>. Personnel turbulence in Army assignments is a key factor in requiring that an audit trail is maintained on all training development actions. The realization that an initiator of a project will seldom (if ever) see its completion dictates the need to maintain files of empirical nature to permit personnel the opportunity to understand the rationale, constraints, refinements, etc., pertaining to an on-going project.

> The proponent for this regulation is the Office of the
> Deputy Chief of Staff for Training. Users are invited
> to send comments and suggested improvements on DA Form
> 2028 (Recommended Changes to Publications) through channels
> to Cdr, TRADOC, ATTN: ATTNG-TDI-ORA, Fort Monroe, Virginia
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